

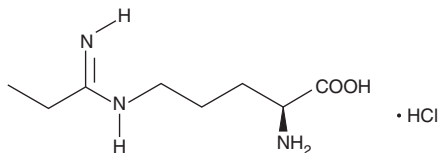
# PRODUCT INFORMATION



## Methyl-L-NIO (hydrochloride)

Item No. 10010252

**CAS Registry No.:** 150403-96-6  
**Formal Name:** N<sup>5</sup>-(1-iminopropyl)-L-ornithine, monohydrochloride  
**MF:** C<sub>8</sub>H<sub>17</sub>N<sub>3</sub>O<sub>2</sub> • HCl  
**FW:** 223.7  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Methyl-L-NIO (hydrochloride) is supplied as a crystalline solid. Methyl-L-NIO (hydrochloride) is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of methyl-L-NIO (hydrochloride) be prepared by directly dissolving the methyl-L-NIO (hydrochloride) compound in aqueous buffers. The solubility of methyl-L-NIO (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Nitric oxide synthase (NOS) catalyzes the conversion of L-arginine to nitric oxide (NO) and citrulline. Methyl-L-NIO (hydrochloride) is a competitive NOS inhibitor that competes with L-arginine for the amino acid binding site. It is a more potent inhibitor of nNOS ( $K_i = 3.0 \mu\text{M}$ ) than eNOS ( $K_i = 10.0 \mu\text{M}$ ) or iNOS ( $K_i = 9.5 \mu\text{M}$ ).<sup>1</sup>

### Reference

1. Babu, B.R. and Griffith, O.W. N<sup>5</sup>-(1-Imino-3-butenyl)-L-ornithine. A neuronal isoform selective mechanism-based inactivator of nitric oxide synthase. *J. Biol. Chem.* **273**, 8882-8889 (1998).

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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